

## CLAIMS

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What is claimed is:

1. A composition effective to prevent or delay the onset of Alzheimer disease in a patient at risk of developing Alzheimer disease comprising one or more partially delipidated protein particles, one or more partially delipidated lipoprotein particles or a combination thereof.

2. A composition effective to treat Alzheimer disease in a patient with Alzheimer disease comprising one or more partially delipidated protein particles, one or more partially delipidated lipoprotein particles or a combination thereof.

3. The composition of Claim 1, wherein the one or more partially delipidated protein particles or the one or more partially delipidated lipoprotein particles are HDL, LDL or VLDL, or a combination thereof.

4. The composition of Claim 2, wherein the one or more partially delipidated protein particles or the one or more partially delipidated lipoprotein particles are HDL, LDL or VLDL, or a combination thereof.

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5. The composition of Claim 1, wherein the one or more partially delipidated protein particles or the one or more partially delipidated lipoprotein particles are prepared by a process comprising:
- obtaining blood containing lipid from the patient;
  - 5 separating cells from the blood to form plasma containing lipid, protein particles and lipoprotein particles;
  - contacting the plasma containing the lipid and the particles with a first organic solvent capable of extracting lipid;
  - mixing the fluid and the first organic solvent;
  - 10 permitting organic and aqueous phases to separate;
  - collecting the aqueous phase containing reduced lipid content, wherein the aqueous phase contains the one or more partially delipidated protein particles or the one or more partially delipidated lipoprotein particles.
6. The composition of Claim 2, wherein the one or more partially delipidated protein or lipoprotein particles are prepared by a process comprising:
- obtaining blood containing lipid from the patient;
  - separating cells from the blood to form plasma containing lipid, protein particles and lipoprotein particles;
  - 20 contacting the plasma containing the lipid and the particles with a first organic solvent capable of extracting lipid;
  - mixing the fluid and the first organic solvent;
  - permitting organic and aqueous phases to separate;
  - collecting the aqueous phase containing reduced lipid content,
  - 25 wherein the aqueous phase contains the one or more partially delipidated protein particles or the one or more partially delipidated lipoprotein particles.

7. A method for treating Alzheimer disease in a patient diagnosed with Alzheimer disease comprising:

administration of an effective amount of one or more partially delipidated protein particles, one or more partially delipidated lipoprotein particles or  
5 a combination thereof, wherein the amount is effective to treat Alzheimer disease in the patient.

8. A method for preventing or delaying the onset of Alzheimer disease in a patient at risk of developing Alzheimer disease comprising:

10 administration of an effective amount of one or more partially delipidated protein particles, one or more partially delipidated lipoprotein particles or a combination thereof, wherein the amount is effective to prevent or delay the onset of Alzheimer disease in the patient.

15 9. The method of Claim 7, wherein the one or more partially delipidated lipoprotein particles is HDL, LDL or VLDL, or a combination thereof.

10 10. The method of Claim 8, wherein the one or more partially delipidated lipoprotein particles is HDL, LDL or VLDL, or a combination thereof.

20 11. The method of Claim 7, wherein the method reduces amyloid plaque, decreases neurofibrillary tangles, reduces levels of A $\beta$ , alters a ratio of A $\beta$ 40 to A $\beta$ 42, affects enzymatic processing of APP, or reduces levels of phosphorylated tau protein.

25 12. The method of Claim 8, wherein the method reduces amyloid plaque, decreases neurofibrillary tangles, reduces levels of A $\beta$ , alters a ratio of A $\beta$ 40 to A $\beta$ 42, affects enzymatic processing of APP, or reduces levels of phosphorylated tau protein.

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13. The method of Claim 7, further comprising administration of a therapeutic agent, wherein the therapeutic agent is an agent that affects lipid metabolism or is an agent that affects parameters associated with Alzheimer disease.

5 14. The method of Claim 8, further comprising administration of a therapeutic agent, wherein the therapeutic agent is an agent that affects lipid metabolism or is an agent that affects parameters associated with Alzheimer disease.

10 15. The method of Claim 13, wherein the therapeutic agent is a selected from the group consisting of synthetic HDL compositions, compositions selectively enhancing HDL function with minimal effect on LDL levels, cholesteryl ester transfer protein inhibitors, cholesterol level lowering agents and triglyceride level lowering agents in a pharmaceutically acceptable vehicle, and combinations thereof.

15 16. The method of Claim 14, wherein the therapeutic agent is a selected from the group consisting of synthetic HDL compositions, compositions selectively enhancing HDL function with minimal effect on LDL levels, cholesteryl ester transfer protein inhibitors, cholesterol level lowering agents and triglyceride  
20 level lowering agents in a pharmaceutically acceptable vehicle, and combinations thereof.

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